



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/656,093B  
Source: IFWC  
Date Processed by STIC: 4/14/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFWO

## RAW SEQUENCE LISTING

DATE: 04/14/2004

PATENT APPLICATION: US/10/656,093B

TIME: 14:39:47

Input Set : A:\256-152div corrected in response to notice to comply.txt

Output Set: N:\CRF4\04142004\J656093B.raw

3 <110> APPLICANT: YOUNG, ANDREW A.  
 4 VINE, WILL  
 5 BEELEY, NIGEL R.A.  
 6 PRICKETT, KATHRYN S.  
 8 <120> TITLE OF INVENTION: INOTROPIC AND DIURETIC EFFECTS OF GLP-1 AND GLP-1 AGONISTS  
 10 <130> FILE REFERENCE: 256-152DIV US  
 12 <140> CURRENT APPLICATION NUMBER: 10/656,093B  
 13 <141> CURRENT FILING DATE: 2003-09-05  
 15 <160> NUMBER OF SEQ ID NOS: 75  
 17 <170> SOFTWARE: PatentIn Ver. 2.1  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 39  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Heloderma horridum  
 24 <220> FEATURE:  
 25 <223> OTHER INFORMATION: Exendin-3  
 27 <400> SEQUENCE: 1  
 28 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 29 1 5 10 15  
 31 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 32 20 25 30  
 34 Ser Gly Ala Pro Pro Pro Ser  
 35 35  
 38 <210> SEQ ID NO: 2  
 39 <211> LENGTH: 39  
 40 <212> TYPE: PRT  
 41 <213> ORGANISM: Heloderma suspectum  
 43 <220> FEATURE:  
 44 <223> OTHER INFORMATION: Exendin-4  
 46 <400> SEQUENCE: 2  
 47 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 48 1 5 10 15  
 50 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 51 20 25 30  
 53 Ser Gly Ala Pro Pro Pro Ser  
 54 35  
 57 <210> SEQ ID NO: 3  
 58 <211> LENGTH: 30  
 59 <212> TYPE: PRT  
 60 <213> ORGANISM: Homo sapiens  
 62 <220> FEATURE:  
 63 <223> OTHER INFORMATION: GLP-1  
 65 <400> SEQUENCE: 3

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```

66 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
67   1           5           10           15
69 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
70           20           25           30
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 39
75 <212> TYPE: PRT
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin or
80   exendin agonist
82 <220> FEATURE:
83 <221> NAME/KEY: MOD_RES
84 <222> LOCATION: (1)
85 <223> OTHER INFORMATION: His, Arg or Tyr
87 <220> FEATURE:
88 <221> NAME/KEY: MOD_RES
89 <222> LOCATION: (2)
90 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
92 <220> FEATURE:
93 <221> NAME/KEY: MOD_RES
94 <222> LOCATION: (3)
95 <223> OTHER INFORMATION: Asp or Glu
97 <220> FEATURE:
98 <221> NAME/KEY: MOD_RES
99 <222> LOCATION: (5)
100 <223> OTHER INFORMATION: Ala or Thr
102 <220> FEATURE:
103 <221> NAME/KEY: MOD_RES
104 <222> LOCATION: (6)
105 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine
107 <220> FEATURE:
108 <221> NAME/KEY: MOD_RES
109 <222> LOCATION: (7)
110 <223> OTHER INFORMATION: Thr or Ser
112 <220> FEATURE:
113 <221> NAME/KEY: MOD_RES
114 <222> LOCATION: (8)
115 <223> OTHER INFORMATION: Ala, Ser or Thr
117 <220> FEATURE:
118 <221> NAME/KEY: MOD_RES
119 <222> LOCATION: (9)
120 <223> OTHER INFORMATION: Asp or Glu
122 <220> FEATURE:
123 <221> NAME/KEY: MOD_RES
124 <222> LOCATION: (10)
125 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met
127 <220> FEATURE:
128 <221> NAME/KEY: MOD_RES

```

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129 <222> LOCATION: (11)  
130 <223> OTHER INFORMATION: Ala or Ser  
132 <220> FEATURE:  
133 <221> NAME/KEY: MOD\_RES  
134 <222> LOCATION: (12)  
135 <223> OTHER INFORMATION: Ala or Lys  
137 <220> FEATURE:  
138 <221> NAME/KEY: MOD\_RES  
139 <222> LOCATION: (13)  
140 <223> OTHER INFORMATION: Ala or Gln  
142 <220> FEATURE:  
143 <221> NAME/KEY: MOD\_RES  
144 <222> LOCATION: (14)  
145 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met  
147 <220> FEATURE:  
148 <221> NAME/KEY: MOD\_RES  
149 <222> LOCATION: (15)...(17)  
150 <223> OTHER INFORMATION: Ala or Glu  
152 <220> FEATURE:  
153 <221> NAME/KEY: MOD\_RES  
154 <222> LOCATION: (19)  
155 <223> OTHER INFORMATION: Ala or Val  
157 <220> FEATURE:  
158 <221> NAME/KEY: MOD\_RES  
159 <222> LOCATION: (20)  
160 <223> OTHER INFORMATION: Ala or Arg  
162 <220> FEATURE:  
163 <221> NAME/KEY: MOD\_RES  
164 <222> LOCATION: (21)  
165 <223> OTHER INFORMATION: Ala or Leu  
167 <220> FEATURE:  
168 <221> NAME/KEY: MOD\_RES  
169 <222> LOCATION: (22)  
170 <223> OTHER INFORMATION: Phe, Tyr or naphthylalanine  
172 <220> FEATURE:  
173 <221> NAME/KEY: MOD\_RES  
174 <222> LOCATION: (23)  
175 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, tert-butylglycine or Met  
177 <220> FEATURE:  
178 <221> NAME/KEY: MOD\_RES  
179 <222> LOCATION: (24)  
180 <223> OTHER INFORMATION: Ala, Glu or Asp  
182 <220> FEATURE:  
183 <221> NAME/KEY: MOD\_RES  
184 <222> LOCATION: (25)  
185 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine  
187 <220> FEATURE:  
188 <221> NAME/KEY: MOD\_RES  
189 <222> LOCATION: (26)

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190 <223> OTHER INFORMATION: Ala or Leu  
 192 <220> FEATURE:  
 193 <221> NAME/KEY: MOD\_RES  
 194 <222> LOCATION: (27)  
 195 <223> OTHER INFORMATION: Ala or Lys  
 197 <220> FEATURE:  
 198 <221> NAME/KEY: MOD\_RES  
 199 <222> LOCATION: (28)  
 200 <223> OTHER INFORMATION: Ala or Asn  
 202 <220> FEATURE:  
 203 <221> NAME/KEY: MOD\_RES  
 204 <222> LOCATION: (31)  
 205 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine  
 206 N-alkylpentylglycine or N-alkylalanine  
 208 <220> FEATURE:  
 209 <221> NAME/KEY: MOD\_RES  
 210 <222> LOCATION: (36)..(38)  
 211 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine  
 212 N-alkylpentylglycine or N-alkylalanine  
 214 <220> FEATURE:  
 215 <221> NAME/KEY: MOD\_RES  
 216 <222> LOCATION: (39)  
 217 <223> OTHER INFORMATION: Ser, Thr, Tyr, Pro, homoproline, 3Hyp, 4Hyp, thioproline,  
 218 N-alkylglycine, N-alkylpentylglycine or N-alkylalanine  
 220 <220> FEATURE:  
 221 <223> OTHER INFORMATION: provided no more than three of Xaa5, Xaa6, Xaa8,  
 222 Xaa10, Xaa11, Xaa12, Xaa13, Xaa14, Xaa15, Xaa16, Xaa17,  
 223 Xaa19, Xaa20, Xaa21, Xaa24, Xaa25, Xaa26, Xaa27 or Xaa28  
 224 are Ala; and the compound is not exendin-3 or exendin-4  
 226 <220> FEATURE:  
 227 <223> OTHER INFORMATION: this peptide may encompass 28-39 residues, wherein  
 228 residues 1-28 are constant and residues 29-39 may vary  
 229 in length according to the specification  
 231 <400> SEQUENCE: 4  
 W--> 232 Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 233 1 5 10 15  
 235 Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 236 20 25 30  
 238 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 239 35  
 241 <210> SEQ ID NO: 5  
 242 <211> LENGTH: 30  
 243 <212> TYPE: PRT  
 244 <213> ORGANISM: Artificial Sequence  
 246 <220> FEATURE:  
 247 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin or  
 248 GLP-1 agonist  
 250 <220> FEATURE:  
 251 <223> OTHER INFORMATION: C-term may be amidated

*what about Xaa's at  
 locations 29-30, 32-35?  
 (see below)*

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TIME: 14:39:47

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```

253 <400> SEQUENCE: 5
254 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
255   1           5           10           15
257 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
258           20           25           30
261 <210> SEQ ID NO: 6
262 <211> LENGTH: 28
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin or
268     GLP-1 agonist
270 <220> FEATURE:
271 <223> OTHER INFORMATION: C-term amidated
273 <400> SEQUENCE: 6
274 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
275   1           5           10           15
277 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
278           20           25
281 <210> SEQ ID NO: 7
282 <211> LENGTH: 28
283 <212> TYPE: PRT
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin or
288     GLP-1 agonist
290 <220> FEATURE:
291 <223> OTHER INFORMATION: C-term amidated
293 <400> SEQUENCE: 7
294 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
295   1           5           10           15
297 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
298           20           25
301 <210> SEQ ID NO: 8
302 <211> LENGTH: 28
303 <212> TYPE: PRT
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: Description of Artificial Sequence: Exendin or
308     GLP-1 agonist
310 <220> FEATURE:
311 <223> OTHER INFORMATION: C-term amidated
313 <400> SEQUENCE: 8
314 His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
315   1           5           10           15
317 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
318           20           25
321 <210> SEQ ID NO: 9
322 <211> LENGTH: 28

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/656,093B

DATE: 04/14/2004  
TIME: 14:39:48

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Output Set: N:\CRF4\04142004\J656093B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24  
Seq#:4; Xaa Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39  
Seq#:47; Xaa Pos. 31,36,37,38  
Seq#:48; Xaa Pos. 36,37,38  
Seq#:49; Xaa Pos. 31  
Seq#:50; Xaa Pos. 31,36,37  
Seq#:51; Xaa Pos. 31,36,37  
Seq#:52; Xaa Pos. 31,36  
Seq#:55; Xaa Pos. 6  
Seq#:59; Xaa Pos. 10  
Seq#:60; Xaa Pos. 22  
Seq#:61; Xaa Pos. 23  
Seq#:65; Xaa Pos. 31,36,37  
Seq#:66; Xaa Pos. 19  
Seq#:67; Xaa Pos. 17  
Seq#:75; Xaa Pos. 29

## VERIFICATION SUMMARY

DATE: 04/14/2004

PATENT APPLICATION: US/10/656,093B

TIME: 14:39:48

Input Set : A:\256-152div corrected in response to notice to comply.txt

Output Set: N:\CRF4\04142004\J656093B.raw

L:232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
M:341 Repeated in SeqNo=4  
L:1131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:16  
M:341 Repeated in SeqNo=47  
L:1162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:32  
L:1187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:16  
L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:16  
M:341 Repeated in SeqNo=50  
L:1253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:16  
M:341 Repeated in SeqNo=51  
L:1286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:16  
M:341 Repeated in SeqNo=52  
L:1354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
L:1439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0  
L:1467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:16  
L:1492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16  
L:1585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:16  
M:341 Repeated in SeqNo=65  
L:1635 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:16  
L:1642 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:67  
L:1673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:16  
L:1878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:16